

# **Regulations for the Idea League Joint Master's Degree Programme in Applied Geophysics**

**Component 1.1: Course and examination regulations for the IDEA League joint Master's degree programme in applied geophysics**

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# **Component 1.1: Course and examination regulations for the IDEA League joint Master's degree programme in applied geophysics**

## **SECTION 1: GENERAL**

### **ARTICLE 1 – SCOPE AND APPLICABILITY OF THESE REGULATIONS**

1. These regulations are applicable to the courses and examinations of the IDEA League joint Master's (i.e. Master of Science) degree programme in Applied Geophysics, hereafter referred to as the joint Master's programme.
2. The joint Master's programme is the shared responsibility of the Faculty of Civil Engineering and Geosciences at the Delft University of Technology, the Department of Earth Sciences at the Swiss Federal Institute of Technology Zurich and the Faculty of Georesources and Material Engineering at the RWTH Aachen University, hereafter referred to as the partner universities.
3. The joint Master's programme is managed by the Executive Committee, which comprises one senior academic and one senior administrator from each of the partner universities plus a non-voting graduate student representative. One of the academics chairs the Executive Committee and one of the senior administrators is the Secretary to the Executive Committee. The positions of Executive Committee Chairperson and Secretary rotate on a two-yearly basis between the partner universities. The duties of the Executive Committee are specified either explicitly or implicitly in Articles 1, 2, 5, 14, 18 and 19 of Component 1.1 and Articles 3, 14 and 19 of Component 1.2 of this document (Regulations for the Idea League Joint Master's Degree Programme in Applied Geophysics).
4. All decisions concerning the credit examinations are the responsibility of the Joint Examination Board, which comprises one senior academic from each of the partner universities. The position of Joint Examination Board Chairperson rotates on a two-yearly basis between the partner universities. The local bodies of each partner university are authorized to decide on behalf of this Board. The duties of the Joint Examination Board are specified either explicitly or implicitly in Articles 8, 10, 11, 14 and 15 of Component 1.1, Articles 3, 4, 7 and 10 to 15 of Component 1.2 and Articles 1 to 4 and 7 of Component 1.3 of this document (Regulations for the Idea League Joint Master's Degree Programme in Applied Geophysics).
5. The course and examination regulations (Component 1.1 of this document), the rules and guidelines (Component 1.2 of this document), the thesis regulations (Component 1.3 of this document), the course calendar and the joint Master's schedule are approved by the Executive Committee and the respective administrations of each partner university.

### **ARTICLE 2 - DEFINITIONS**

The regulations, rules and guidelines described in this document are consistent with the relevant Dutch, German and Swiss laws. Certain terms shall be understood as follows:

1. Student: anyone enrolled in the joint Master's programme.
2. Practical training may include practical exercises in one of the following forms:
  - (i) writing a thesis;
  - (ii) writing a paper/completing an assignment, project or technological design;
  - (iii) completing a design or research assignment;
  - (iv) conducting a literature study;
  - (v) completing a work placement;
  - (vi) taking part in fieldwork or an excursion;
  - (vii) conducting tests and experiments;
  - (viii) or participating in another educational activity focused on the attainment of a particular skill.
3. Credit examination: a test of a student's knowledge, skills and experience with regard to a particular course, and the assessment of this test by at least one examiner (see also Article 12 of Component 1.1) appointed for that task by the Executive Committee.
4. Course calendar: publication containing all specific information relevant to the joint Master's programme - the course calendar can be found on the TUD web page.
5. Joint Master's schedule: form and schedule of courses, practical training and credit examinations for the joint Master's programme - the joint Master's Schedule can be found on the TUD web page.
6. Working day: each day from Monday to Friday, with the exclusion of official national holidays.
7. Examiners: those appointed by the Executive Committee for the purpose of setting and grading the practical training and credit examinations.
8. ECTS: credits as specified in the European Credit Transfer System that are assigned on the basis of positive results of practical training and credit examinations.
9. Final assessment: confirmation that the student has acquired the necessary credits to graduate with a joint Master's degree in applied geophysics.

### **ARTICLE 3 – EXIT QUALIFICATIONS OF THE JOINT MASTER'S DEGREE PROGRAMME IN APPLIED GEOPHYSICS**

Graduates of the joint Master's programme:

1. are capable of drawing on broad and deep scientific knowledge to perform their work in an analytical fashion;
2. are able to synthesise knowledge and solve complex problems in a creative way;
3. have the qualities needed for employment in circumstances that require sound judgement, personal responsibility and initiative, in complex and unpredictable professional environments;

4. are able to assume leading roles (including management positions) in companies and research organisations and are able to contribute to innovation;
5. are able to work in an international environment, showing social and cultural sensitivity and demonstrating language and communication abilities, which will in part have been acquired through experience of team work and the study periods in the three countries;
6. have an awareness of any possible ethical, social, environmental, aesthetic and economic implications of their work, to which they will act appropriately;
7. have an awareness of their need to update their knowledge and skills.

Graduates of the joint Master's programme also have a command of the following domain- and subject-specific skills and competencies:

1. the core knowledge and understanding required in the field of applied geophysics;
2. knowledge of the methods and technical practice in this field of study;
3. relevant theoretical knowledge and methods, including modelling;
4. advanced knowledge of specific research areas, depending on their chosen specialization;
5. the specific attitude and way of thinking required in the specific subjects of their field of specialization;
6. an awareness of the connections between their field and other disciplines and the ability to engage in interdisciplinary work.

#### **ARTICLE 4 – FULL-TIME AND PART-TIME COURSE FORMATS**

The joint Master's programme is only given on a full-time basis.

#### **ARTICLE 5 – ADMISSION TO THE JOINT MASTER'S PROGRAMME**

1. Admission to the joint Master's programme may be granted by the Executive Committee to:
  - a. applicants in possession of a Bachelors degree in appropriate subject areas (e.g. earth sciences, environmental sciences, physics, engineering) issued by one of the partner universities,
  - b. applicants who have received high-quality B.Sc. degrees (e.g. a minimum upper second-class honours in the U.K. type of system or a minimum grade-point average of 75% in other systems) in appropriate subject areas (e.g. earth sciences. environmental sciences, physics, engineering) from other top universities worldwide.
2. Applicants who are not in possession of a Bachelors degree in appropriate subject areas issued by one of the partner universities, but who are in possession of a confirmation of admission provided by one of the partner universities, are eligible for admission.
3. The Executive Committee may depart from paragraph 1 by allowing certain students to attend the joint Master's programme.

4. To deal with students from different backgrounds, a suite of convergence courses are offered in the first period at the Delft University of Technology to smooth out possible deficiencies.

#### **ARTICLE 6 – LANGUAGE**

English shall be the language used for all teaching and examinations.

### **SECTION 2: COMPOSITION OF THE JOINT MASTER'S PROGRAMME AND THE FINAL ASSESSMENT**

#### **ARTICLE 7**

1. The composition of the recommended teaching programme is described in the course calendar.
2. The final assessment for a joint Master's degree in applied geophysics, the normal duration of which is two years, is an integral part of the joint Master's programme. Each student must obtain a minimum of 120 ECTS to be awarded a joint Master's degree in applied geophysics. It is recommended that students acquire their 120 ECTS's from the complete 120 ECTS-programme described in the course calendar. However, each successful student's 120 ECTS's must comprise:
  - (i) a minimum of 3 out of 4 core courses and a minimum 23 out of 29 ECTS's for the joint Master's degree regular courses shown in the course calendar as being offered at the Delft University of Technology
  - (ii) a minimum of 2 out of 3 core courses and a minimum of 24 out of 30 ECTS's for the joint Master's degree regular courses shown in the course calendar as being offered at the Swiss Federal Institute of Technology Zurich,
  - (iii) a minimum of 4 out of 6 core courses and a minimum of 16 out of 20 credit points for the joint Master's degree regular courses shown in the course calendar as being offered at the RWTH Aachen University
  - (iv) 40 credit points for the Master's thesis project, and
  - (v) 1 credit point for the obligatory presentation of the Master's thesis project at a colloquium.
3. If a student requires 10 or fewer ECTS's to obtain the minimum 120 ECTS to be awarded a joint Master's degree in applied geophysics, subject to permission from the Executive Committee, he/she may be allowed to obtain the necessary ECTS's by taking alternative earth science or earth engineering Master's level courses offered at one of the partner universities. All courses not listed in the course calendar must be approved by the joint examination board.

## **SECTION 3: CREDIT EXAMINATIONS**

### **ARTICLE 8 – THE NUMBER, TIMING AND FREQUENCY OF CREDIT EXAMINATIONS**

1. Students must be given at least two opportunities per year to take credit examinations:
  - the first shall immediately follow the teaching period in which the relevant course was taught and completed;
  - the second shall be given at the end of one of the other teaching periods;
  - Under normal circumstances, students will only have the opportunity to re sit an examination twice.
  - For students to proceed in the joint Master's programme past their study period at the Delft University of Technology, it will be necessary for them to obtain a minimum of 16 ECTS's at the end of periods 1 and 2.
2. At the beginning of each academic year, a timetable specifying the dates and times of written and/or oral credit examinations shall be drawn up and published in the joint Master's schedule.
3. In the event that a course component is not taught within one of the partner universities, and that there is therefore no indication of the number of times it is possible to take a credit examination as referred to in paragraph 1, the course and examination regulations of the relevant faculty or degree program are applicable, provided no decision to the contrary has been taken by the Joint Examination Board. Subject to satisfying the laws governing the respective university, alternative courses can be offered.
4. Under certain circumstances and subject to satisfying laws governing the respective university, the Joint Examination Board may allow departures from (i) the program of courses (described in the course calendar) on request and (ii) the timing of the practical training and credit examinations (described in the joint Master's schedule) and the number of times that a credit examination may be taken. The interests of the students must not be harmed by such changes.

### **ARTICLE 9 – THE ORDER OF THE CREDIT EXAMINATIONS**

The joint Master's schedule specifies the order in which the practical training and credit examinations are taken.

### **ARTICLE 10 – THE PERIOD OF VALIDITY OF CREDIT EXAMINATIONS**

1. Students who have interrupted or delayed their studies must re-take any credit examinations they passed more than ten years ago.
2. The Joint Examination Board may, in a student's favour, depart from the provisions of paragraph 1 (e.g. by accepting credits taken more than 10 years ago at the RWTH Aachen University).

## **ARTICLE 11 – THE FORM OF THE CREDIT EXAMINATIONS AND THE METHOD OF TESTING**

1. Well before the beginning of the relevant study period, the appointed examiners for each course propose the form of the credit examination to the Joint Examination Board and the relevant body at the local university. Once approved by the Joint Examination Board and the relevant body at the local university, the form of the credit examinations is specified in the joint Master's schedule. Practical skills are tested during the hours allocated for practical training.
2. Subject to satisfying laws governing the respective university, the appointed examiner(s) may depart from the provisions of paragraph 1 in the students' favour.
3. Each student with a physical or sensory disability shall be given the opportunity to take all credit examinations, including practical training, in a way that, to the greatest extent possible, is adapted to the disability in question. The form or length of the credit examinations shall be adapted to the individual situation, or practical aids shall be made available.
4. The options and facilities specified in the previous paragraph must be requested by the student concerned within five weeks of the start of the course. This request should be accompanied by a medical certificate issued no more than one year previously by a doctor, psychologist or student counsellor. All requests involving dyslexia should be backed by a recognised dyslexia testing body.
5. For credit examinations set and marked by more than 1 examiner, the Joint Examination Board checks that both examiners judge the credit examination according to the same standards. A single person is designated the responsible examiner for each respective credit examination.

## **ARTICLE 12 – ORAL CREDIT EXAMINATIONS**

An oral examination, the duration of which must extend no less than 15 minutes and no more than 45 minutes, shall involve at least two examiners.

## **ARTICLE 13 – THE ESTABLISHMENT AND NOTIFICATION OF RESULTS**

As soon as possible after a period of practical training or credit examination, and always within a maximum of ten (10) working days, the examiner shall declare the results to the students, the respective administration units and in particular the coordinating office at the Delft University of Technology.

## **ARTICLE 14 – CANDIDATES' RIGHTS TO INSPECT THEIR CREDIT EXAMINATION DOCUMENTS AND GRADES AND THEIR RIGHT TO APPEAL**

For at least four weeks after the results of a credit examination have been announced, students have the right to inspect their credit examinations and the grades assigned to these examinations. If they judge that their credit examinations have been incorrectly graded, they have the right to appeal: first to the original examiner(s), second to the Joint Examination Board and third to the relevant appeal boards of the respective universities or, if such an appeal board does not exist at a university, the Executive Committee. All such appeals must be completed within four (4) weeks of the announcement of the grades.

## **SECTION 4: EXEMPTION FROM CREDIT EXAMINATIONS**

### **ARTICLE 15 – EXEMPTION FROM CREDIT EXAMINATIONS OR PRACTICAL EXERCISE**

If a student can prove that he/she has already proven his/her knowledge, skills and experience in the subject matter of one or more courses, the Joint Examination Board may grant the student exemption from the respective practical training or credit examinations.

## **SECTION 5: COUNSELLING**

### **ARTICLE 16- COUNSELLING**

If at any time a student appears to be experiencing problems, staff at the respective partner universities will take the initiative to offer counselling.

## **SECTION 6: PROVISIONS FOR IMPLEMENTATION**

### **ARTICLE 17 – PUBLICATION**

This entire document comprising Component 1.1, 1.2 and 1.3, together with the course calendar and the joint Master's schedule shall be incorporated in the Course Guide for the Idea League Joint Master's Degree in Applied Geophysics and posted on the official Joint Master web page.

### **ARTICLE 18 – MODIFICATION OF THE REGULATIONS**

These regulations may be modified by a special decision of the Executive Committee, subject to the condition that the modifications do not negatively affect the interests of the students.

### **ARTICLE 19 – DATE OF COMMENCEMENT**

Approved by the Executive Committee for the joint Master's degree programme in applied geophysics. These regulations shall come into force on September 1, 2009.

## **Component 1.2: Rules and guidelines established for the IDEA League joint Master's degree programme in applied geophysics**

### **ARTICLE 1 – AREA OF APPLICATION**

These rules and guidelines apply to the practical training and credit examinations of the joint Master's degree programme in applied geophysics (i.e. the joint Master's programme).

### **ARTICLE 2 – DEFINITIONS**

The same definitions apply to Component 1.2 of this document as described in Articles 1 and 2 of Component 1.1 of this document.

### **ARTICLE 3 – THE DAILY BUSINESS**

Each of the partner universities appoints a local coordinator responsible for day-to-day activities associated with the joint Master's programme at the respective university. The Executive Committee appoints one of these coordinators, the "Manager", to coordinate the entire joint Master's programme. The locating and scheduling of courses, practical training and credit examinations are established by the local coordinator in consultation with the administrations of the respective universities. The Joint Examination Board arbitrates any problems associated with local and overall coordination and the locating and scheduling of courses, practical training and credit examinations.

### **ARTICLE 4 – REGISTERING FOR COURSES, PERIODS OF TRAINING AND CREDIT EXAMINATIONS**

1. All students of the joint Master's programme are automatically registered for all courses, periods of practical training and all credit examinations at the Delft University of Technology and the Swiss Federal Institute of Technology Zurich, except for those associated with the initial convergence courses offered by the Delft University of Technology. For the initial convergence courses, the students must register for the examinations through the TAS system of the Delft University of Technology or, if that is not operational, by handing in or posting the appropriate form to the Delft University of Technology examination administrators ten (10) working days, at the very latest, before the examination is due to take place. At the RWTH Aachen University, every effort will be made to assist the students register individually for the courses, periods of training and examinations.
2. To unsubscribe from an examination, students must submit the necessary forms to the respective partner universities at least 7 working days before the examination date.
3. If a student can demonstrate to the Joint Examination Board that circumstances beyond his/her control have prevented or will prevent him/her from taking the credit examination, he/she may be allowed to take the credit examination, without penalty, at the next available credit examination date (see Article 8 of Component 1.1) or earlier, if convenient for the respective examiner(s).

4. In exceptional cases, the examiner(s) and/or Joint Examination Board may allow deviations from the examination registration terms referred to in paragraphs 1 to 3 of this article, as long as they are in the students' best interests.

#### **ARTICLE 5 – DEFAULT OR MISBEHAVIOUR DURING AN EXAMINATION**

If a student

1. has not appropriately unsubscribed from an examination (point 1 in Article 4) and the Joint Examinations Board has not allowed an exception (points 3 and 4 in Article 4) and the student does not appear for the examination

or

2. a student does not follow the local examination rules during an examination, he/she will automatically be assigned a failing grade for that examination.

#### **ARTICLE 6 – THE NUMBER, TIMING AND FREQUENCY OF CREDIT EXAMINATIONS**

1. Details on the number, timing and frequency of credit examinations are provided in Article 8 of Component 1.1.
2. In consultation with the students, the examiner(s) make arrangements for any presentations, practical examinations, oral examinations etc. to take place at mutually convenient times.

#### **ARTICLE 7 – REPORTS AND THESES**

1. Any reports required to complete credit examinations and the final thesis must be submitted at least ten (10) working days before the grades are to be assigned.
2. Under certain circumstances, the examiner(s) and/or Joint Examination Board may postpone the submission date(s).

#### **ARTICLE 8 – NOTIFICATION OF RESULTS**

Information on when and to whom the results of a period of practical training or credit examination should be given is provided in Article 13 of Component 1.1.

#### **ARTICLE 9 – CANDIDATES' RIGHTS TO INSPECT THEIR CREDIT EXAMINATION DOCUMENTS AND GRADES AND POSSIBLE FOLLOW-UP TALKS**

1. Details on the candidates' rights to inspect their credit examination documents and grades are provided in Article 14 of Component 1.1.
2. Depending on the circumstances (i.e. the location of the students and respective examiner(s)), follow-up talks on credit examinations may be arranged between the students and the examiner(s) or his/her/their delegate at a mutually convenient time.

## ARTICLE 10 - CRITERIA

In any decisions that have to be made, the examiner(s) and/or the Joint Examination Board take as their directives the following criteria:

1. preserving the quality of the practical training and the standards of the credit examinations;
2. optimising the time available for students to study for their credit examinations;
3. being sympathetic with students whose studying has been impeded due to circumstances beyond their control.

## ARTICLE 11 - GRADING

1. The grades given for the various periods of practical training and credit examinations are given on a results list. All grades are given as ECTS grades. The levels of the ECTS grades are shown in the following table.

<b>ECTS grade or assessment</b>	<b>Description</b>
<b>A</b>	Excellent
<b>B</b>	Very good
<b>C</b>	Good
<b>D</b>	Satisfactory
<b>E</b>	Sufficient
<b>F or FX</b>	Fail
<b>X</b>	Exemption

2. In the final evaluation of a student's grades, the Joint Examination Board does not take into account incomplete lists of grades.
3. A student will receive the allocated number of ECTS's for each course provided he/she has obtained a minimum grade of E in the respective examination or has been granted an exemption (X; see Article 15 of Component 1.1 for the guidelines on exemptions).
4. A student is eligible for the award of the joint Master's degree in applied geophysics once his/her marks list is complete and all the final grades are passes (A through E) or are supplemented with exemptions.

## ARTICLE 12 – DETERMINING THE CREDIT EXAMINATION RESULTS

1. If there is a lack of consensus within the Joint Examination Board on the grades to be assigned to a student's credit examinations, a vote is held. The results of votes cast by the Joint Examination Board are determined on the basis of a majority vote.
2. If there is a tie in the voting, then the Chairperson of the Joint Examination Board has the casting vote.

### **ARTICLE 13 – WITH HONOURS**

1. A student can be awarded his/her joint Master's degree in applied geophysics "with honours" provided that the Joint Examination Board decides he/she deserves this qualification and the following conditions have been satisfied:
  - a. The weighted average grade gained in the courses listed in the course calendar as being statutory for the Master's degree is at least a B and the grades list contains no grades lower than a D;
  - b. the Master's degree study duration for the student in question is no more than 3 years;
  - c. the grade given for the thesis research is at least a B;
  - d. the examiner(s) of the thesis research has submitted a "with honours" recommendation.
2. The Joint Examination Board may decide that the Joint Master's Degree in Applied Geophysics will be awarded with "with honours", even if all points a to d have not been met.

### **ARTICLE 14 – CERTIFICATES AND DECLARATIONS**

1. As proof that candidates have successfully gained their joint Master's degree in applied geophysics, the students receive a diploma from each university.
2. The three diploma certificates will be accompanied by a joint supplement issued by TUD that includes the grades.
3. If the candidate has been awarded a joint Master's degree in applied geophysics "with honours" (see Article 13), then the term "with honours" will be included on the degree certificate.
4. Students who have successfully passed one or more credit examinations, but who upon leaving the joint Master's programme are not eligible for a degree certificate as intended in item 1, may receive a declaration of such from the Joint Examination Board provided that they submit a request for such.

### **ARTICLE 15 – ADMINISTRATION AND REGISTRATION OF INFORMATION**

1. The partner universities' educational and student administration units are responsible for registering the results of practical training and credit examinations and for all other information relating to the individual student's study progress. These results and this information are forwarded to the overall administration body at the Delft University of Technology. This overall administration body also registers exemptions, declarations and certificates extended to the student by the Joint Examination Board.
2. Any notifications concerning information registered on a student will be passed on, as required, from the administration units to the (i) student in question, (ii) the overall administration body at the Delft University of Technology, (iii) the respective examination appeals board, (iv) members of the Executive Committee, (v) members of the Joint Examination Board, (vi) the examiners, (vii) the coordinators and (viii)

any other individuals within the partner universities who are involved in the education or supervision of the student in question.

**ARTICLE 16 – MAKING USE OF THE RIGHT TO DEVIATE**

Before requesting the right to deviate from these rules and guidelines, students should consult with the local coordinator.

**ARTICLE 17 – RIGHTS OF APPEAL**

Information on student's rights of appeal is provided in Article 14 of Component 1.1.

**ARTICLE 18 – AMENDING THE RULES AND REGULATIONS**

No amendments that affect the current academic year may be made unless it can be proved that the amendments are in no way detrimental to the interests of the students.

**ARTICLE 19 - EXTENSIONS AFTER SEPTEMBER 1**

Students who require an extension past the two-year period to complete the requirements for the joint Master's degree in applied geophysics must register for the new academic year.

**ARTICLE 20 - IMPLEMENTATION**

This ruling comes into effect on 1 September 2006.

Approved by the Executive Committee for the joint Master's degree programme in applied geophysics. These regulations shall come into force on September 1, 2009.

## **Component 1.3: Master's thesis regulations**

### **ARTICLE 1 - CHOICE OF RESEARCH THESIS THEME**

1. Early in the study period at RWTH Aachen, the Joint Examination Board publishes a list and description of research themes that are suitable for Master's thesis projects.
2. After approximately two weeks, representatives from each of the three partner universities and from industry give short presentations on the potential research projects. After the presentations, the students have the opportunity to discuss these themes with the representatives. Some themes may involve extensive periods of closely supervised research in industry, government or other university laboratories.
3. Students may also propose research themes for their thesis projects. Such proposals must be submitted to and confirmed by the Joint Examination Board at least ten days before the presentation of research themes.
4. Within two weeks of the presentations, each student submits to the Joint Examination Board a ranked list of three research themes that he/she may be interested in pursuing in his/her thesis project.
5. Two weeks later, the list of assigned Master's thesis projects is published; subject to availability and an equitable distribution of active thesis projects amongst the three partner universities, every reasonable effort is made to provide the student with a research theme that matches his/her preferences and suits his/her knowledge, skills and experience. The Principal Supervisor (see point 7 below) of each project makes the final decision as to which student, if any, is sufficiently or best qualified and motivated to undertake the project.
6. If a student is not satisfied with the thesis project that he/she is assigned, he/she may appeal to the Joint Examination Board.
7. Each student is assigned a Principal Supervisor who assumes the role of primary advisor to the student for the duration of the thesis project.
8. A working plan of each thesis project (see Article 3) must be submitted to the Joint Examination Board for approval at least two weeks before the research begins. The final list of approved thesis projects is forwarded to the administrations of the three partner universities. Signed copies of the descriptions of the thesis projects are held by the students, supervisors and Chairperson of the Joint Examination Board.

### **ARTICLE 2 - THESIS PROJECTS OUTSIDE OF THE PARTNER UNIVERSITIES**

1. A thesis project conducted outside of the partner universities requires the explicit approval of the Joint Examination Board.
2. In addition to a Principal Supervisor from one of the partner universities, a supervisor from the outside organization will be assigned to advise the student.
3. Acceptable outside organisations include large and small companies, government agencies and other university groups, all of which work in various fields of applied geophysics.

4. At least once every two weeks, the Principal Supervisor is expected to monitor the progress of a student performing his research in an outside organisation.

### **ARTICLE 3 - DESCRIPTION OF THE RESEARCH THESIS PROJECT**

Copies of the description of each thesis project must include the following information:

- Name of student and student registration number;
- Date and location;
- Title of the thesis project;
- Name(s) of supervisor(s);
- Commencement date;
- Anticipated completion date;
- Description (approximately half an A4 page). The description should include: a brief introduction to the subject, the thesis objectives and a brief description of the work programme;
- Signatures of the student, supervisor(s) and Chairperson of the Joint Examination Board;
- Names and functions of the signatories.

### **ARTICLE 4 - BEGINNING THE RESEARCH THESIS PROJECT**

1. A student may only begin his/her thesis project once he/she has obtained 69 ECTS's and the research project has been approved by the Joint Examination Board.
2. Should there be good grounds for a student not obtaining 69 ECTS's, the Joint Examination Board may allow the thesis project to begin.

### **ARTICLE 5 - DURATION OF THE RESEARCH THESIS PROJECTS**

The duration of a thesis project is 28 weeks (40 ECTS). In addition, 28 hours (1 ECTS) is reserved for the preparation and presentation of the research thesis results during a 15 to 30 minute Colloquium.

### **ARTICLE 6 - SUPERVISION AND FORM OF THE THESES**

1. The student must report to his/her supervisor(s) at least once every two weeks during the course of the thesis project;
2. At the 8- and 16-week marks, the student presents verbal reports on the status of the research. At the 20-week mark, the students and supervisors decide on the content and form of the written thesis. If there are sufficient original results, then an article may be prepared for publication in a scientific journal. Such an article, appropriately bound in the form of a thesis, is acceptable as the Master's thesis.
3. The written thesis should normally contain the following chapters:
  - a. Abstract,
  - b. Introduction to the problem,

- c. Description of the study site (where appropriate),
- d. Description of the methods developed (where appropriate),
- e. Description of the methods employed,
- f. Results,
- g. Conclusions
- h. Outlook.

The resultant thesis should be subjected to one round of corrections by the Principal Supervisor or his delegate before being formally submitted and examined.

#### **ARTICLE 7 - COMPLETING THE REQUIREMENTS FOR THE JOINT MASTER'S DEGREE IN APPLIED GEOPHYSICS BEFORE SEPTEMBER 1**

The Joint Examination Board urges all scientific staff involved in the joint Master's degree in applied geophysics to give candidates the opportunity to present the results of their thesis research at a Colloquium before September 1, as long as the candidates formally submit their theses in early August (exact submission deadline will be specified in the academic calendar to be distributed at the beginning of the programme). The date of the Colloquium should be announced via e mail and should be posted on notice boards.

#### **ARTICLE 9 - GRADING THE RESEARCH THESIS PROJECTS**

Each thesis project is assessed by an ad hoc thesis committee normally consisting of 3 scientists (a minimum of 2 scientists is required), one of whom should be the Principal Supervisor and another scientist should normally be from one of the partner universities.

The Principal Supervisor is responsible for forming the ad hoc thesis committee.

The completed thesis must be made available to this committee at least ten working days before the date of the Colloquium.

Members of the ad hoc thesis committee must justify any comments made on the thesis. At least 2 members of this committee must be involved in assessing the presentation given during the colloquium. These members are given the opportunity to ask the candidate questions about the thesis work in a closed sitting held after the colloquium.

The ad hoc thesis committee makes recommendations concerning the grades (A to F; see Article 11 of Component 1.2)) to be given to the thesis and colloquium. The final decisions concerning the grades are the responsibility of the Principal Supervisor.

As soon as possible after the thesis and Colloquium have been graded and always within a maximum of ten (10) working days, the Principal Supervisor shall declare the results to the student, the respective administration units and in particular the coordinating office at the Delft University of Technology.

## Appendix A

### Examination mode at the RWTH Aachen University

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<b>Course</b>	<b>Type, length and weighting (%) of examinations</b>
<b>Geophysics special methods: NMR and SIP</b>	written exam: 60 minutes
<b>Geophysical Logging and Log Interpretation</b>	written exam: 60 minutes (50 %) written report on field work (acquisition, processing and interpretation): approx. 20 pages (50 %)
<b>Exploration Geology</b>	written exam: 90 minutes
<b>Petrophysics</b>	written report on laboratory experiments: approx. 10 pages (75 %) oral presentation of 15 minutes (25 %)
<b>Petroleum systems: sedimentary basin modeling</b>	written exam: 90 minutes (80 %) oral presentation of modeling results (20 %)
<b>Geothermics</b>	written exam: 90 minutes

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